

FILE 'CAPLUS' ENTERED AT 23:12:44 ON 20 NOV 2002

L1 101912 S THIOL OR THIOPHENE OR THIOANISOLE OR THIAZOLE OR THIOACETATE  
L2 0 S L1 (W) NONAQUEOUS ELECTROLYTE  
L3 14 S L1 (W) ELECTROLYTE  
L4 4 S L3 AND (NONAQUEOUS OR NON AQUEOUS OR NON-AQUEOUS)  
L5 223 S L1 AND BATTERY  
L6 214 S L5 NOT L3  
L7 214 FOCUS L6 1-  
L8 214 S L7  
L9 116 S L7 AND ELECTROLYTE  
L10 116 FOCUS L9 1-  
L11 116 S L10  
L12 15 S L10 AND SOLID  
L13 116 S L10  
L14 32 S L10 AND (NONAQUEOUS OR NON-AQUEOUS OR NON AQUEOUS)  
L15 47 S L12 OR L14

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L15 ANSWER 1 OF 47 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 2002:754017 CAPLUS  
 DOCUMENT NUMBER: 137:265711  
 TITLE: **Nonaqueous electrolyte** batteries  
 with ~~thiol~~-coated anodes and their  
 manufacture  
 INVENTOR(S): Suzuki, Yusuke  
 PATENT ASSIGNEE(S): Sony Corp., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002289179	A2	2002-1004	JP 2001-91267	20010327

OTHER SOURCE(S): MARPAT 137:265711

L15 ANSWER 2 OF 47 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 2002:735449 CAPLUS  
 DOCUMENT NUMBER: 137:281821  
 TITLE: **Nonaqueous electrolyte** solution  
 and secondary lithium **battery** using the  
**electrolyte**  
 INVENTOR(S): Yasukawa, Hideki; Shima, Kunihiisa; Kominato, Asao  
 PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002280060	A2	2002-0927	JP 2001-73413	20010315

OTHER SOURCE(S): MARPAT 137:281821

L15 ANSWER 3 OF 47 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 2002:714433 CAPLUS  
 DOCUMENT NUMBER: 137:250260  
 TITLE: Secondary **nonaqueous electrolyte**  
**battery**  
 INVENTOR(S): Kuranaka, Satoshi; Bito, Yasuhiko; Kouduki, Kiyomi;  
 Takahashi, Shozo; Eda, Nobuo  
 PATENT ASSIGNEE(S): Matsushita Electric Industrial Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002270223	A2	2002-0920	JP 2001-63065	20010307

L15 ANSWER 4 OF 47 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 2002:693347 CAPLUS  
 DOCUMENT NUMBER: 137:204003  
 TITLE: Secondary **battery** with **nonaqueous**  
**electrolyte** containing aromatic compound

INVENTOR(S): Kozuki, Kiyomi; Eda, Nobuo; Takahashi, Shozo; Bito, Yasuhiko; Kuranaka, Satoshi  
PATENT ASSIGNEE(S): Matsushita Electric Industrial Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002260627	A2	20020913	JP 2001-59610	20010305

L15 ANSWER 5 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 2002:693346 CAPLUS  
DOCUMENT NUMBER: 137:204002  
TITLE: Secondary **battery** with **nonaqueous electrolyte** containing aromatic compound  
INVENTOR(S): Koduki, Kiyomi; Bito, Yasuhiko; Takahashi, Shozo; Eda, Nobuo; Kuranaka, Satoshi  
PATENT ASSIGNEE(S): Matsushita Electric Industrial Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002260626	A2	20020913	JP 2001-59609	20010305

L15 ANSWER 6 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 2002:522266 CAPLUS  
DOCUMENT NUMBER: 137:81379  
TITLE: **Nonaqueous electrolyte secondary battery**  
INVENTOR(S): Watanabe, Shoichiro; Ohira, Noriyuki  
PATENT ASSIGNEE(S): Matsushita Electric Industrial Co., Ltd., Japan; Ube Industries, Ltd.  
SOURCE: PCT Int. Appl., 31 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002054524	A1	20020711	WO 2001-JP10655	20011205
W: CN, JP, KR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
EP 1256995	A1	20021113	EP 2001-272801	20011205
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				

PRIORITY APPLN. INFO.: JP 2000-402935 A 20001228  
WO 2001-JP10655 W 20011205  
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 7 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 2002:505274 CAPLUS

DOCUMENT NUMBER: 137:81358  
TITLE: Ethylene carbonate-.gamma.-butyrolactone-based  
**nonaqueous** electrolytes for secondary  
batteries  
INVENTOR(S): Sekino, Masahiro; Satoh, Asako; Fujiwara, Masashi;  
Hasebe, Hiroyuki  
PATENT ASSIGNEE(S): Japan  
SOURCE: U.S. Pat. Appl. Publ., 25 pp., Cont.-in-part of U. S.  
Ser. No.961,138.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002086216	A1	20020704	US 2001-26816	20011227
US 2002064712	A1	20020530	US 2001-961138	20010924
JP 2002184462	A2	20020628	JP 2001-338586	20010928
PRIORITY APPLN. INFO.:			JP 2000-296074	A 20000928
			US 2001-961138	A2 20010924
			JP 2001-338586	A 20010928

L15 ANSWER 8 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 2002:313469 CAPLUS  
DOCUMENT NUMBER: 136:343312  
TITLE: **Nonaqueous electrolyte** solution  
and secondary lithium **battery** using the  
**electrolyte** solution  
INVENTOR(S): Hamamoto, Shunichi; Abe, Hiroshi; Ushikoshi,  
Yoshihiro; Matsumori, Yasuo  
PATENT ASSIGNEE(S): Ube Industries, Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002124298	A2	20020426	JP 2000-315411	20001016
OTHER SOURCE(S):		MARPAT 136:343312		

L15 ANSWER 9 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 2002:253130 CAPLUS  
DOCUMENT NUMBER: 136:281940  
TITLE: **Nonaqueous electrolyte** secondary  
**battery**  
INVENTOR(S): Sekino, Masahiro; Satoh, Asako; Fujiwara, Masashi;  
Hasebe, Hiroyuki  
PATENT ASSIGNEE(S): Kabushiki Kaisha Toshiba, Japan  
SOURCE: Eur. Pat. Appl., 33 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1193788	A2	20020403	EP 2001-308138	20010925
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, SI, LT, LV, FI, RO  
CN 1347166 A 20020501 CN 2001-132663 20010907  
PRIORITY APPLN. INFO.: JP 2000-296074 A 20000928

L15 ANSWER 10 OF 47 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:780530 CAPLUS

DOCUMENT NUMBER: 135:320525

TITLE: **Nonaqueous electrolyte secondary battery**

INVENTOR(S): Nirasawa, Takao; Ito, Hidetoshi; Omaru, Atsuo

PATENT ASSIGNEE(S): Sony Corp., Japan

SOURCE: Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1148570	A2	20011024	EP 2001-109161	20010412
A: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002008720	A2	20020111	JP 2000-333571	20001031
CN 1322028	A	20011114	CN 2001-121439	20010418
US 2002018940	A1	20020214	US 2001-837847	20010418
PRIORITY APPLN. INFO.:		JP 2000-122417	A	20000418
		JP 2000-333571	A	20001031

L15 ANSWER 11 OF 47 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:710149 CAPLUS

DOCUMENT NUMBER: 135:245040

TITLE: **Nonaqueous electrolytes for secondary lithium ion batteries**

INVENTOR(S): Tsuruya, Hirotaka; Kanno, Koichi; Sakamoto, Hitoshi;  
Takahashi, Yuzuru; Shimada, Koji; Yoshida, Yoshinori;  
Tai, Shinichi

PATENT ASSIGNEE(S): Mitsubishi Gas Chemical Co., Ltd., Japan; Sumitomo  
Seika Chemicals Co., Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001266939	A2	20010928	JP 2000-73201	20000316
OTHER SOURCE(S):		MARPAT 135:245040		

L15 ANSWER 12 OF 47 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:691891 CAPLUS

DOCUMENT NUMBER: 135:244993

TITLE: **Nonaqueous electrolyte secondary battery and method of preparing carbon-based material for anode**

INVENTOR(S): Omaru, Atsuo; Fujishige, Yusuke

PATENT ASSIGNEE(S): Sony Corporation, Japan

SOURCE: Eur. Pat. Appl., 30 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1134827	A2	20010919	EP 2001-106598	20010315
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001332263	A2	20011130	JP 2001-13338	20010122
US 2002015888	A1	20020207	US 2001-810962	20010316
PRIORITY APPLN. INFO.:			JP 2000-73453	A 20000316
			JP 2001-13338	A 20010122

L15 ANSWER 13 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 2001:143493 CAPLUS  
DOCUMENT NUMBER: 134:369342  
TITLE: Multi-layered polymer electrolytes towards interfacial  
stability in lithium ion batteries  
AUTHOR(S): Aldissi, M.  
CORPORATE SOURCE: Fractal Systems Inc., Tampa, FL, 33626, USA  
SOURCE: Journal of Power Sources (2001), 94(2), 219-224  
CODEN: JPSODZ; ISSN: 0378-7753  
PUBLISHER: Elsevier Science S.A.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 14 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 2000:378203 CAPLUS  
DOCUMENT NUMBER: 133:7084  
TITLE: **Nonaqueous electrolyte** batteries  
INVENTOR(S): Maruta, Junichi  
PATENT ASSIGNEE(S): Japan Storage Battery Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000156245	A2	20000606	JP 1998-329721	19981119

L15 ANSWER 15 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1999:490366 CAPLUS  
DOCUMENT NUMBER: 131:146931  
TITLE: Composite electrode, its manufacture, and secondary  
**nonaqueous electrolyte** lithium  
**battery** using it as cathode  
INVENTOR(S): Sotomura, Tadashi  
PATENT ASSIGNEE(S): Matsushita Electric Industrial Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11214008	A2	19990806	JP 1998-15856	19980128
US 6245458	B1	20010612	US 1998-211779	19981215
PRIORITY APPLN. INFO.:			JP 1998-15856	A 19980128

L15 ANSWER 16 OF 47 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:127081 CAPLUS  
DOCUMENT NUMBER: 130:176356  
TITLE: **Nonaqueous electrolyte** for  
electrical storage devices  
INVENTOR(S): Mcewen, Alan B.; Ein-Eli, Yair  
PATENT ASSIGNEE(S): Covalent Associates, Inc., USA  
SOURCE: PCT Int. Appl., 30 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9908299	A1	19990218	WO 1998-US16625	19980810
W: JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5965054	A	19991012	US 1997-910143	19970812
EP 1027713	A1	20000816	EP 1998-938481	19980810
R: DE, FR, GB				
JP 2001512903	T2	20010828	JP 2000-506668	19980810
PRIORITY APPLN. INFO.:			US 1997-910143	A 19970812
			WO 1998-US16625	W 19980810
OTHER SOURCE(S):		MARPAT 130:176356		
REFERENCE COUNT:		4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT		

L15 ANSWER 17 OF 47 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:782113 CAPLUS  
DOCUMENT NUMBER: 130:84027  
TITLE: Rechargeable **nonaqueous** lithium batteries  
with electrolytes containing monomer additives for  
safety  
INVENTOR(S): Mao, Huanyu; Wainwright, David Stanley  
PATENT ASSIGNEE(S): Moli Energy 1990 Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10321258	A2	19981204	JP 1998-127567	19980511
PRIORITY APPLN. INFO.:			CA 1997-2205863	19970516

L15 ANSWER 18 OF 47 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:764156 CAPLUS  
DOCUMENT NUMBER: 130:15816  
TITLE: Polymerizable additives for making secondary  
**nonaqueous** lithium-ion batteries safe after  
overcharge  
INVENTOR(S): Mao, Huanyu; Wainwright, David Stanley  
PATENT ASSIGNEE(S): Moli Energy (1990) Limited, Can.  
SOURCE: Eur. Pat. Appl., 13 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 878861	A1	19981118	EP 1997-310625	19971224
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
CA 2205683	AA	19981116	CA 1997-2205683	19970516
US 6074776	A	20000613	US 1998-6015	19980112
PRIORITY APPLN. INFO.:			CA 1997-2205683	A 19970516
REFERENCE COUNT: 6			THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT	

L15 ANSWER 19 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1998:398676 CAPLUS  
DOCUMENT NUMBER: 129:43359  
TITLE: Secondary **nonaqueous electrolyte**  
batteries using improved cathode collectors  
INVENTOR(S): Ito, Miho  
PATENT ASSIGNEE(S): Nippondenso Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10162833	A2	19980619	JP 1996-335130	19961129

L15 ANSWER 20 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1998:190373 CAPLUS  
DOCUMENT NUMBER: 128:232785  
TITLE: Secondary **nonaqueous electrolyte**  
batteries with aromatic additives in electrolytes  
INVENTOR(S): Nishino, Hajime; Kitagawa, Masaki; Ookochi, Masaya;  
Takeuchi, Takashi; Koshina, Masaru  
PATENT ASSIGNEE(S): Matsushita Electric Industrial Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10079262	A2	19980324	JP 1996-234023	19960904

L15 ANSWER 21 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1998:71436 CAPLUS  
DOCUMENT NUMBER: 128:117395  
TITLE: **Nonaqueous electrolyte** lithium  
secondary batteries using cathodes containing  
carbonaceous materials and preparation of same  
cathodes  
INVENTOR(S): Ito, Shuji; Murata, Toshihide; Yoshifuji, Nobuhiko;  
Toyoguchi, Yoshinori  
PATENT ASSIGNEE(S): Matsushita Electric Industrial Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese



FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10021912	A2	19980123	JP 1996-170082	19960628

L15 ANSWER 22 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1997:770606 CAPLUS  
DOCUMENT NUMBER: 128:91007  
TITLE: An all-polymer charge storage device. [Erratum to document cited in CA127:265498]  
AUTHOR(S): Gofer, Yossef; Sarker, Haripada; Killian, Jeffrey G.; Poehler, Theodore O.; Searson, Peter C.  
CORPORATE SOURCE: Department of Materials Science and Engineering, The Johns Hopkins University, Baltimore, MD, 21218, USA  
SOURCE: Applied Physics Letters (1997), 71(23), 3447  
CODEN: APPLAB; ISSN: 0003-6951  
PUBLISHER: American Institute of Physics  
DOCUMENT TYPE: Journal  
LANGUAGE: English

L15 ANSWER 23 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1997:601735 CAPLUS  
DOCUMENT NUMBER: 127:265498  
TITLE: An all-polymer charge storage device  
AUTHOR(S): Gofer, Yossef; Sarker, Haripada; Killian, Jeffrey G.; Poehler, Theodore O.; Searson, Peter C.  
CORPORATE SOURCE: Department of Materials Science and Engineering, The Johns Hopkins University, Baltimore, MD, 21218, USA  
SOURCE: Applied Physics Letters (1997), 71(11), 1582-1584  
CODEN: APPLAB; ISSN: 0003-6951  
PUBLISHER: American Institute of Physics  
DOCUMENT TYPE: Journal  
LANGUAGE: English

L15 ANSWER 24 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1997:508695 CAPLUS  
DOCUMENT NUMBER: 127:111263  
TITLE: Batteries having chemically stable macromolecular **solid** electrolytes  
INVENTOR(S): Kodama, Yasunobu; Oda, Takashi; Terashi, Kazuo  
PATENT ASSIGNEE(S): Sanyo Electric Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09180757	A2	19970711	JP 1995-338570	19951226

L15 ANSWER 25 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1997:443251 CAPLUS  
DOCUMENT NUMBER: 127:68580  
TITLE: Aromatic monomer gassing agents for protecting **nonaqueous** lithium batteries against overcharge  
INVENTOR(S): Mao, Huanyu; Von Sacken, Ulrich  
PATENT ASSIGNEE(S): Moli Energy (1990) Limited, Can.  
SOURCE: Eur. Pat. Appl., 13 pp.  
CODEN: EPXXDW

DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 776058	A2	19970528	EP 1996-115490	19960926
EP 776058	A3	19980722		
EP 776058	B1	20010829		
R: DE, FR, GB				
CA 2163187	AA	19970518	CA 1995-2163187	19951117
US 5776627	A	19980707	US 1996-728274	19961008
JP 09171840	A2	19970630	JP 1996-304894	19961115
JP 3061759	B2	20000710		
US 6033797	A	20000307	US 1998-31278	19980227
PRIORITY APPLN. INFO.:			CA 1995-2163187 A	19951117
			US 1996-728274 A3	19961008

L15 ANSWER 26 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1997:234259 CAPLUS  
DOCUMENT NUMBER: 126:227649  
TITLE: Secondary **nonaqueous electrolyte**  
batteries  
INVENTOR(S): Usami, Kyohei; Kawai, Miho; Maeda, Yutaka  
PATENT ASSIGNEE(S): Densoo Kk, Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09045369	A2	19970214	JP 1996-150254	19960521
PRIORITY APPLN. INFO.:			JP 1995-149631	19950523

L15 ANSWER 27 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1997:203971 CAPLUS  
DOCUMENT NUMBER: 126:201656  
TITLE: Secondary **nonaqueous electrolyte**  
batteries and manufacture of anodes for the batteries  
INVENTOR(S): Ito, Shuji; Murata, Toshihide; Hasegawa, Masaki;  
Mifuji, Yasuhiko; Toyoguchi, Yoshinori  
PATENT ASSIGNEE(S): Matsushita Electric Ind Co Ltd, Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 27 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09027317	A2	19970128	JP 1995-158232	19950623
US 5629109	A	19970513	US 1995-492681	19950620
PRIORITY APPLN. INFO.:			JP 1994-142936	19940624
			JP 1995-112164	19950510

L15 ANSWER 28 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1997:129574 CAPLUS  
DOCUMENT NUMBER: 126:133588  
TITLE: **Nonaqueous electrolyte** batteries

using electrolytes containing self discharge inhibitors

INVENTOR(S): Jinno, Maruo; Uehara, Mayumi; Sakurai, Atsushi; Nishio, Koji; Saito, Toshihiko

PATENT ASSIGNEE(S): Sanyo Denki Kk, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08321312	A2	19961203	JP 1995-150844	19950524

L15 ANSWER 29 OF 47 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:560789 CAPLUS

DOCUMENT NUMBER: 125:226559

TITLE: **Solid polymer electrolyte** having increased conductivity and **solid-state battery** including this **electrolyte**

INVENTOR(S): Walker, Charles W. , Jr.; Plichta, Edward J.; Behl, Wishvender K.

PATENT ASSIGNEE(S): United States Dept. of the Army, USA

SOURCE: Statutory Invent. Regist., 3 pp.  
CODEN: SRXXEV

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 1576	H1	19960806	US 1994-315213	19940307

L15 ANSWER 30 OF 47 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1994:58562 CAPLUS

DOCUMENT NUMBER: 120:58562

TITLE: **Nonaqueous-electrolyte** lithium batteries with storage stability and charge-discharge efficiency

INVENTOR(S): Watanabe, Hiroshi; Yoshimura, Seiji; Takahashi, Masatoshi; Ooshita, Ryuji; Furukawa, Sanehiro

PATENT ASSIGNEE(S): Sanyo Electric Co, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05258753	A2	19931008	JP 1991-287933	19911101
JP 3086510	B2	20000911		

L15 ANSWER 31 OF 47 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1993:542958 CAPLUS

DOCUMENT NUMBER: 119:142958

TITLE: **Polymeric solid electrolyte** having improved ion conductivity at room temperature

INVENTOR(S): Takeuchi, Masataka; Yashima, Hideo

PATENT ASSIGNEE(S): Showa Denko Kk, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05074467	A2	19930326	JP 1991-233437	19910912

L15 ANSWER 32 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1993:476317 CAPLUS  
DOCUMENT NUMBER: 119:76317  
TITLE: Organic disulfide compound-conducting polymer  
**battery** electrode of excellent  
charge-discharge reversibility  
INVENTOR(S): Uemachi, Hiroshi; Sato, Yoshiko; Sotomura, Tadashi;  
Takeyama, Kenichi  
PATENT ASSIGNEE(S): Matsushita Electronics Corp., Ltd., Japan  
SOURCE: Eur. Pat. Appl., 9 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 534407	A1	19930331	EP 1992-116289	19920923
R: DE, FR, GB				
JP 05082133	A2	19930402	JP 1991-243087	19910924
JP 3116451	B2	20001211		
US 5413882	A	19950509	US 1992-950476	19920924
PRIORITY APPLN. INFO.:			JP 1991-243087 A	19910924

L15 ANSWER 33 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1992:49933 CAPLUS  
DOCUMENT NUMBER: 116:49933  
TITLE: Polymer **solid electrolyte**  
INVENTOR(S): Kishiro, Masayuki; Taniguchi, Takashi  
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03208206	A2	19910911	JP 1990-3128	19900109

L15 ANSWER 34 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1991:563066 CAPLUS  
DOCUMENT NUMBER: 115:163066  
TITLE: All-polymer **solid** secondary batteries  
INVENTOR(S): Kojima, Takakazu  
PATENT ASSIGNEE(S): Japan, Defense Agency Technical Research and  
Development Institute, Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02215060	A2	19900828	JP 1989-34702	19890214
JP 06036371	B4	19940511		

L15 ANSWER 35 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1989:98856 CAPLUS  
DOCUMENT NUMBER: 110:98856  
TITLE: Sheet-type cathode, its manufacture and secondary  
**battery**  
INVENTOR(S): Kabata, Toshiyuki; Ohsawa, Toshiyuki; Yoneyama,  
Sachiko; Kimura, Okitoshi  
PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan  
SOURCE: PCT Int. Appl., 52 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 3  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8808210	A1	19881020	WO 1988-JP373	19880414
W: DE, JP, US				
DE 3890245	T	19890503	DE 1988-3890245	19880414
DE 3890245	C2	19921210		
US 4999263	A	19910312	US 1988-290411	19881215
PRIORITY APPLN. INFO.:			JP 1987-92791	19870415
			JP 1987-168280	19870706
			JP 1987-169689	19870709
			JP 1987-248093	19871002
			JP 1987-283095	19871111
			WO 1988-JP373	19880414

L15 ANSWER 36 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1987:580095 CAPLUS  
DOCUMENT NUMBER: 107:180095  
TITLE: **Nonaqueous** secondary batteries using  
poly(3-methyl-**thiophene**) as the  
cathode-active material  
AUTHOR(S): Nagatomo, Takao; Mitsui, Mitsuyuki; Matsutani,  
Kazuhiro; Omoto, Osamu  
CORPORATE SOURCE: Dep. Electron. Eng., Shibaura Inst. Technol., Tokyo,  
108, Japan  
SOURCE: Transactions of the Institute of Electronics,  
Information and Communication Engineers, Section E:  
English (1987), E70(4), 346-8  
CODEN: TIEEEV; ISSN: 0913-574X  
DOCUMENT TYPE: Journal  
LANGUAGE: English

L15 ANSWER 37 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1987:462028 CAPLUS  
DOCUMENT NUMBER: 107:62028  
TITLE: Secondary **nonaqueous** batteries  
INVENTOR(S): Shishikura, Riichi; Konuma, Hiroshi; Sakai, Toshiyuki;  
Nakamura, Hidenori; Takeuchi, Masataka; Kobayashi,  
Masao  
PATENT ASSIGNEE(S): Showa Denko K. K., Japan; Hitachi, Ltd.  
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
CODEN: JKXXAF

DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62010862	A2	19870119	JP 1985-146767	19850705

L15 ANSWER 38 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1987:462003 CAPLUS  
DOCUMENT NUMBER: 107:62003  
TITLE: Secondary **nonaqueous** batteries  
INVENTOR(S): Yoshino, Akira; Sanechika, Kenichi  
PATENT ASSIGNEE(S): Asahi Chemical Industry Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61285656	A2	19861216	JP 1985-126146	19850612

L15 ANSWER 39 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1987:443136 CAPLUS  
DOCUMENT NUMBER: 107:43136  
TITLE: Secondary **nonaqueous** batteries  
INVENTOR(S): Yoshino, Akira; Sanechika, Kenichi  
PATENT ASSIGNEE(S): Asahi Chemical Industry Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61285662	A2	19861216	JP 1985-126144	19850612

L15 ANSWER 40 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1987:443128 CAPLUS  
DOCUMENT NUMBER: 107:43128  
TITLE: Secondary **nonaqueous** batteries  
INVENTOR(S): Kobayashi, Masao; Takeuchi, Masataka; Shishikura, Riichi; Sakai, Toshiyuki; Nakamura, Hidenori; Konuma, Hiro  
PATENT ASSIGNEE(S): Showa Denko K. K., Japan; Hitachi, Ltd.  
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61279059	A2	19861209	JP 1985-119746	19850604

L15 ANSWER 41 OF 47 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1986:227737 CAPLUS

DOCUMENT NUMBER: 104:227737  
 TITLE: Polymer **battery**  
 INVENTOR(S): Tabei, Hisao; Ebisawa, Fumihiko; Kurihara, Takashi  
 PATENT ASSIGNEE(S): Nippon Telegraph and Telephone Public Corp., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61008855	A2	19860116	JP 1984-128844	19840622

L15 ANSWER 42 OF 47 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1986:53613 CAPLUS  
 DOCUMENT NUMBER: 104:53613  
 TITLE: Polymer cathode for **nonaqueous-electrolyte** batteries  
 PATENT ASSIGNEE(S): Toyota Central Research and Development Laboratories, Inc., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60127663	A2	19850708	JP 1983-234474	19831212

L15 ANSWER 43 OF 47 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1983:412799 CAPLUS  
 DOCUMENT NUMBER: 99:12799  
 TITLE: **Nonaqueous electrolyte battery**  
 PATENT ASSIGNEE(S): Sanyo Electric Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 58064769	A2	19830418	JP 1981-164820	19811014
JP 02054624	B4	19901122		

L15 ANSWER 44 OF 47 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1983:62084 CAPLUS  
 DOCUMENT NUMBER: 98:62084  
 TITLE: **Solid electrolyte battery**  
 PATENT ASSIGNEE(S): Japan Storage Battery Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57154774	A2	19820924	JP 1981-41229	19810319

L15 ANSWER 45 OF 47 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1982:446517 CAPLUS  
 DOCUMENT NUMBER: 97:46517  
 TITLE: **Solid electrolyte battery**  
 PATENT ASSIGNEE(S): Japan Storage Battery Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57040870	A2	19820306	JP 1980-115573	19800821

L15 ANSWER 46 OF 47 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1982:207428 CAPLUS  
 DOCUMENT NUMBER: 96:207428  
 TITLE: **Solid electrolyte battery**  
 PATENT ASSIGNEE(S): Japan Storage Battery Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57034677	A2	19820225	JP 1980-108970	19800807

L15 ANSWER 47 OF 47 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1982:171102 CAPLUS  
 DOCUMENT NUMBER: 96:171102  
 TITLE: **Solid electrolyte battery**  
 PATENT ASSIGNEE(S): Japan Storage Battery Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57013670	A2	19820123	JP 1980-87623	19800626